

footing and superstructure thus preventing sizable lateral deformations in the protected building.

Claim Rejections – 35 USC §103

Referring to the edited Claim 1 presented above, please, find here my remarks on the patents allegedly anticipating Claim 1:

- The Japanese Patent 3-169984 most striking difference with the current invention is in the signs of curvatures at the top and bottom surfaces of slide tracks. Thus, the Japanese Patent in figure 4 depicts a slide track where the top surface is sagged upward and the bottom surface is sagged downward while my invention requires that each of the slide tracks should have convexities of its sliding surfaces which always look down. The Japanese design is, obviously, copied from a sort of machinery where keeping an upper pad at the same level during all process of vibration is the must while the magnitude of a lateral force that could be transferred upward into the building superstructure is of no primary importance. The very presence of the tooth-gear sliding surfaces in the Japanese design anticipates that, due to developing of a considerable lateral shear, a smooth sliding surface cannot be sufficient. On the other hand, in my invention, where minimizing of a shear transfer from the ground to the building superstructure is a priority, a smooth sliding surface is quite adequate.
- Yaghoubian's U.S. Patent No 4,726,161 in figure 5 shows a vertical guide or stem (21) which is, mechanically, similar to the column stub from my invention. However, his stem in its lower end, in contrast with my stub, is unrestrained not only against rotation but against any lateral displacement too.
- Tada et al.'s U.S. Patent No 4,188,681 proposes a bridge support structure that really incorporates a self-lubricating spherical foot bearing but this structure is not a kind of the seismic base isolation devices like my *earthquake protector*: it simply cannot and is not intended to accommodate any lateral displacements.

Conclusions

Thank you very much for your critical remarks which resulted in my editing of the Claim and Abstract of Disclosure for my patent application. However, there are no reasons to consider that the prior art may compromise novelty of the proposed *earthquake protector*. Though none of the elements of my *earthquake protector* is, most likely, novel, their combination for the specific purpose of earthquake protection is unique both technically and in sense of performance (see, e.g., <http://www.ecs.csun.edu/~shustov/EP-2005.htm>).

 Valentin Shustov